**K-5 Math Lesson Plan**

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| **Teacher:**  **Sanderford, Mitchell (Kelley)** | | | **Grade: 5** | | | | | **Date(s)**:  1-2 day completion |
| **Unit Title:**  Unit 1- Understand the Decimal Place Value System | | | | | **Corresponding Unit Task:**  **Teach prior to Task 2** | | | |
| **Essential Question(s): Big Idea:**  **How can I create various representations of decimal numbers to the thousandths?** | | | | | | | | |
| **Materials/Resources** | | | | | **Essential Vocabulary** | | | |
| **Teacher:**  **White board, markers,**  **Timers** | | **Student:**  **Pencil, math journal, Base 10 blocks**  **Recording sheet (Decimal Distractions Pt. 1 & 2)** | | | | **Thousands, hundreds, tens, ones, tenths, hundredths, thousandths, standard form, expanded Form, word form, compare, <less than, greater than>, equal to=**  **Ascending order, descending order** | | |
| **Learning Experience** | | | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards: 5. NBT.3b**  **b. Compare two decimals to thousandths based on meanings of the**  **digits in each place, using >, =, and < symbols to record the results**  **of comparisons.** | | | | | | | |
| **I Can Statement(s):**  **I can create decimal numbers to the thousandths using various representations.** | | | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  Students will go outside and perform timed relays. They will need to record their times in a sheet of paper. In a small group students will take their times and read, write and represent each time. ( base-ten, expanded, number name) | | | | | | | |
| **Teacher Directed:**  Teacher will introduce comparing and ordering decimals by modeling using base ten blocks. 1 Flat = 1 whole, 1 rod= 1 tens, 1 cube = 1/1000. Teacher will use the number 356.425 to demonstrate what it would look like using base –ten blocks and apply it to paper. Have students to draw pictorial representation in their journal. Next teacher will model 356.42 using base-ten blocks. Students will draw pictorial representation.  Teacher will ask the students to look at each representation and discuss in their table groups how they are alike and different (comparing). Let students know that they are comparing the numbers. Have students to discuss in their table groups which number is greatest. Have students to explain how they got their answer. | | | | | | | |
| **Guided Practice:**  Have students to use their timed relay results to complete the following chart. What would happen if you extend this number by adding 5 thousandths? What happens to the order of the results of the race? Create chart recording results.   |  |  |  |  | | --- | --- | --- | --- | | Teams | Actual Time | Extended time by .005 | Order of results | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | |  |  |  |  | | | | | | | | |
| **Independent Practice:**      Students will work in small groups using the comparing decimal game. | | | | | | | |
| **Closing/Summarizing Strategy:**  **The completion times for three runners in a 100-yard dash are 9.75 seconds, 9.7 seconds, and 9.675 seconds. Which is the winning time?** | | | | | | | |
| **Differentiation Strategies** | | | | | | | | |
| **Extension** | | | | **Intervention** | | | **Language Development** | |
| * Students can include the use of fractions as they represent the various numbers. * Students may develop decimal cards that have students sort numbers using tenths, hundredths, and thousandths rather than just thousandths * Increase each number by 0.015   Order number from least to greatest | | | | * Reduce number of decimal cards students must sort. * Students highlight tenths, hundredths, and thousandths place with different color highlighters. * Break down the task so students first sort by tenths. Once sorted by tenths the student would then continue further sorting by the hundredths place and finally by thousandths. * <http://nlvm.usu.edu/en/nav/frames_asid_152_g_2_t_1.html?from=category_g_2_t_1.html> | | | Drill Math vocabulary cards\   * Abbreviated form of task provided after the original task if needed.   **Writing to Learn:** After key points in the unit (after each task?), have students write in a journal using the following sequence:   * *Record*: state what they have learned * *Compar*e: Students pair up and compare what they have written and clarify. * *Revise*: Based on the interaction, students create a more developed and polished version of their statements. | |
| **Assessment(s): At the end of the lesson students will complete the attached mini assessment.** | | | | | | | | |
| **Teacher Reflection:** (Next steps?)   * What went well? * Student understandings/misconceptions * Specific notes about students’ thinking * What do I need to reteach/review tomorrow or in the future? * New ideas or changes for next time | | | | | | | | |